

**DATA PROCESSING DEVICE HAVING SELECTIVE DATA CACHE
ARCHITECTURE AND COMPUTER SYSTEM INCLUDING THE SAME**

5

ABSTRACT OF THE DISCLOSURE

The disclosure is a data processing device with selective data cache architecture and a computer system including the data processing device.

The data processing device is comprised of a microprocessor, a coprocessor, a microprocessor data cache, an X-data cache, and a Y-data cache. The

10

microprocessor fetches and executes instructions, and the coprocessor carries out digital signal processing functions. The microprocessor data cache stores data provided from the microprocessor. The X-data cache stores a first group of data provided from the coprocessor while the Y-data cache stores a second group of data provided from the coprocessor.